IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:		§	
		§	
	Yoram REITER et al.	§	
		§	
Serial No.:	10/510,229	§	
		§	
Filed:	October 13, 2004	§	Group Art Unit: 1648
		§	
For:	Antigen-Presenting Complex-Binding Compositions And Uses Thereof	§	
		§	Attorney Docket: **28429**
Examiner:	Zachariah Lucas	§	

Commissioner for Patents
P. O. Box 1450
Alexandria VA 22313

DECLARATION OF YORAM REITER UNDER 37 C.F.R. §1.132

I am presently employed as a researcher at the Technion Institute of Technology, Haifa Israel, Department of Biology, where I am a professor of Molecular Immunology and head of the laboratory of Molecular Immunology. Since August 2006 I also serve as the dean of the Faculty of Biology at the Technion. I received my Ph.D. degree from the Weizmann Institute of Science in 1993, worked as a post-doctoral fellow in the laboratory of Molecular Biology at the National Cancer Institute, National Institutes of Health in Bethesda Maryland, where I developed a new approach to targeted therapy of cancer.

My research focuses on molecular immunology of cancer and infectious diseases with the emphasis on the development of novel therapeutics based on antibody engineering. Since the beginning of my career, I have published more than 80 scientific articles in highly regarded journals and books, and have presented my achievements at many international scientific conferences.

I am a member of the American Association of Immunologists, the American Association for Cancer Research, the Israel Immunology Society, and was awarded several research prizes including the US government technology transfer award, the Rothschild Foundation post doctoral award, the Alon fellowship award for

outstanding young scientist administered by the Israel council for higher education, the Teva Prize for research, The Yuludan and Taub prizes for excellence in research. I was elected recently to the editorial board of *Pharmaceutical Design* and serve as a reviewer for many journals such as the *Journal of Immunology, Cancer Research, Journal of Immunological Methods* and more.

I am a co-inventor of the subject matter claimed in the above-referenced U.S. patent application.

I have read the Official Actions issued with respect to the above-identified application.

In this Official Action, the Examiner has rejected claims 141-149, 151-160 and 196-199 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement and claims 141-149, 151-160 and 196-198 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Attached is an Appendix including experimental results of studies performed in my laboratory in which we applied the teachings of the instant application towards other APM/antigen complexes including those derived from the HIV, CMV, EBV, influenza virus as well as other human viruses. As shown, we were able to reproducibly obtain antibodies meeting the functional limitations claimed, directed against all the aforementioned viruses. These pathogens belong to the classes of orthomyxoviridae, herpes viruses and retroviruses which in my opinion provide representative examples human viruses.

This study conclusively shows that the method of obtaining antibodies as described in the instant application can enable any person skilled in the art to routinely isolate antibodies with the added functional limitations of claim 141, *i.e.*, being capable of binding the APM/antigen complex but not the APM or the antigenic peptide when not in complex.

In re Application of: Yoram Reiter et al
Serial No.: 10/510,229
Filed: October 13, 2004
Office Action Mailing Date: October 9, 2007

Examiner: Lucas, Zachariah
Group Art Unit: 1648
Attorney Docket: 28429

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United states Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

April 8, 2008

Enclosures:

- Appendix with experimental results; and
- CV of Yoram REITER and a list of publications

APPENDIX

ISOLATION OF ANTIBODIES CAPABLE OF BINDING A COMPLEX OF APM AND AN ANTIGEN DERIVED FROM A PATHOGEN BUT NOT THE APM OR THE ANTIGEN WHEN NOT IN COMPLEX

Experimental Methods

Complexes of APM and antigens derived from pathogens were prepared as described in Example 1 of the instant application (Pages 64-66 and 70-71). Antibodies capable of binding the specific APM/antigen complexes were isolated by screening an antibody phage display library (as described in Pages 66, 71-72 in the instant application as filed) followed by ELISA and FACS analyses (as described in Pages 66-79 in the instant application) which qualified the antibodies for their ability to bind the APM/antigen complex but not the APM or the antigen when not in complex.

Experimental Results

I. ANTIBODIES DIRECTED AGAINST THE HLA-A2/CMV-pp65 COMPLEX

Isolation of antibodies capable of specifically binding the HLA-A2/CMV PP65$_{495\text{-}503}$ (NLVPMVATV) complex – A Fab-phage display library was screened using the HLA-A2/CMV PP65$_{495\text{-}503}$ (NLVPMVATV) complex and following the third round of selection 54 out of the 96 isolated phage clones were shown by ELISA assays to specifically bind the HLA-A2/CMV pp65 complex (*i.e.*, the APM/antigen complex) but not the HLA-A2 (the APM molecule) when complexed with a control peptide (e.g., the gp100$_{280\text{-}288}$ peptide) (Figure 1, hereinbelow).

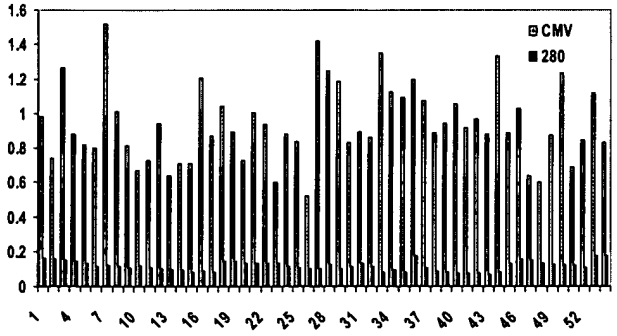


Figure 1

Qualifying the antibodies for their ability to bind the APM/antigen complex but not the APM or the antigen when not in complex - DNA fingerprint analyses of the 54 isolated Fab clones revealed two distinct antibodies. The specificity of the Fab

antibodies to the HLA-A2-CMV $PP65_{495-503}$ complex (i.e., the APM/antigen complex) but not to the HLA-A2 (the APM molecule) or the CMV $PP65_{495-503}$ peptide (the antigen) when not in complex was further tested as follows; ELISA assays were performed by coating plates with the HLA-A2/CMV $PP65_{495-503}$ complex or with various complexes formed of HLA-A2 and several restricted control antigenic peptides such as EBV_{280} (GLCTLVAML), $hTERT_{865}$ (RLVDDFLLV), $hTERT_{540}$ (ILAKFLHWL), melanoma $gp100_{209}$ (IMDQVPFSV), melanoma $gp100_{280}$ (YLEPGPVTA), Gag_{77-85} (SLYNTVATL), $Pol_{476-484}$ (ILEPVHGV), TAX_{11-19} (LLFGYPVYV), MART-1_{26-35} (ELAGIGILTV), TARP (FLRNFSLML) or XAGE (GVFPSAPSPV).

As is clearly shown in Figures 2a-b hereinbelow, the Fab antibodies specifically bind the HLA-A2/CMV $PP65_{495-503}$ but not the HLA-A2 when complexed with control antigenic peptides (*i.e.*, the APM in the absence of the specific antigenic peptide).

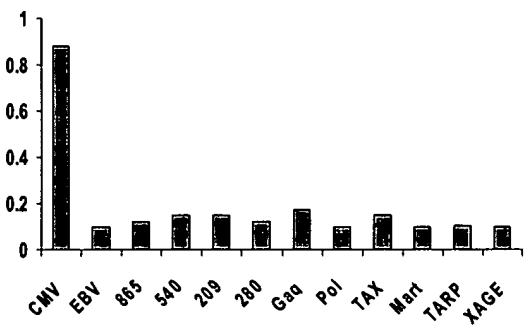


Fig. 2a

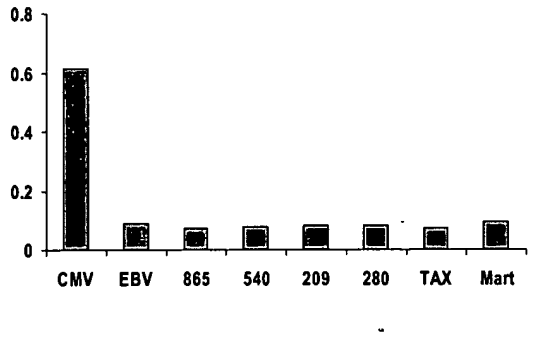
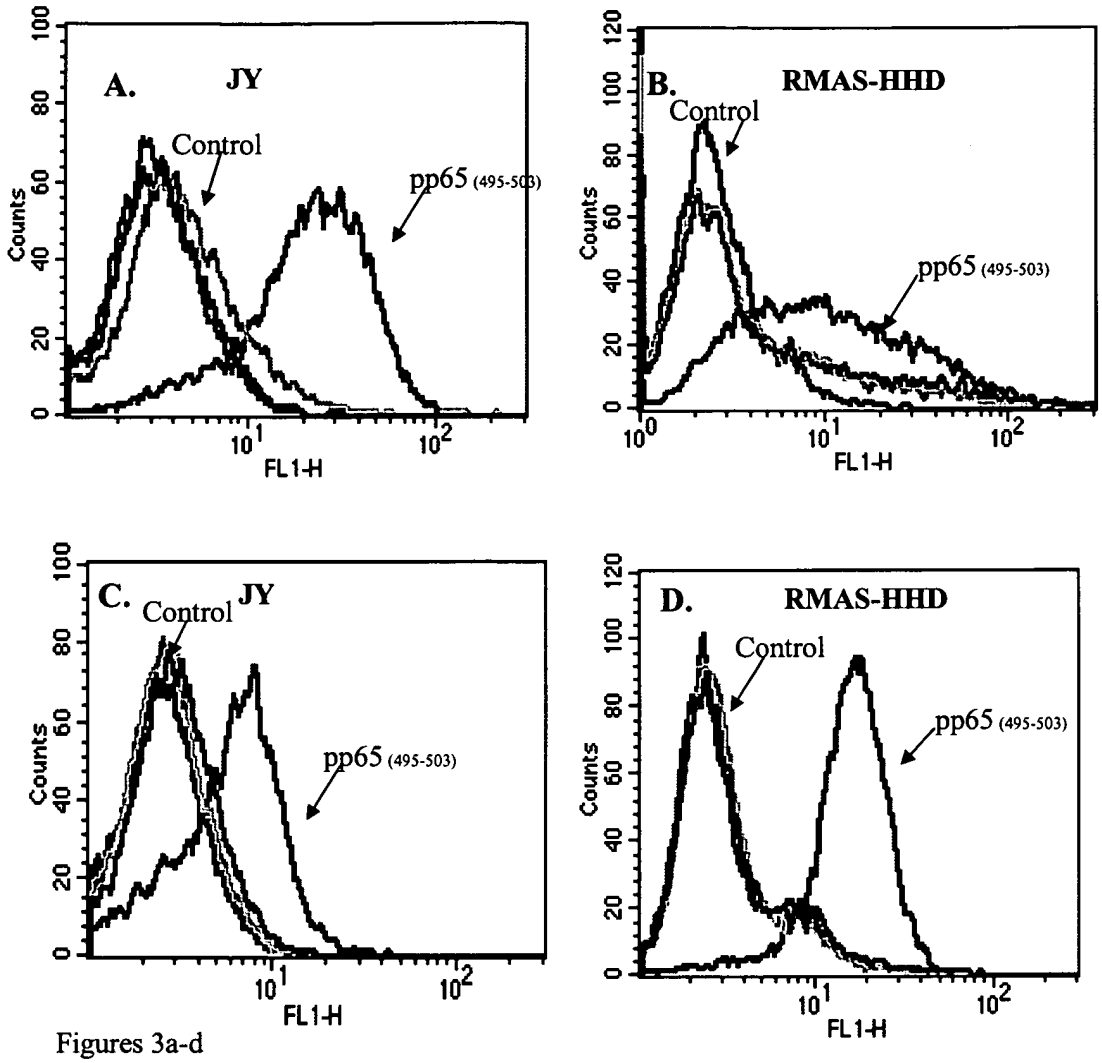


Fig. 2b

Control ELISA assays performed with plate-immobilized CMV $pp65_{495-503}$ peptide revealed that the HLA-A2/CMV $pp65_{495-503}$ – specific antibody is unable to bind the peptide alone (i.e., in the absence of the APM molecule) under conditions allowing the specific binding of the antibody to the HLA-A2/CMV $pp65_{495-503}$ complex (data not shown).

These results conclusively show that the Fab antibodies specifically bind the HLA-A2/CMV $pp65_{495-503}$ complex for which they were selected but not the peptide alone or the APM (HLA-A2) when complexed with control antigenic peptides (*i.e.*, the APM in the absence of the specific antigenic peptide)

The specificity of the antibodies to the complex was further tested on cells expressing the specific APM molecule (HLA-A2 in this case) such as the murine TAP2 (transporter associated with antigen presentation)-deficient RMA-S cells which are transfected with the human HLA-A2 gene or the TAP^+ JY cells which express the HLA-A2 gene, which were loaded with the specific antigenic peptide (CMV $pp65_{495-503}$) or with various HLA-A2-restricted control peptides. As is clearly shown in representative FACS analyses, the Fab antibodies specifically bind to HLA-A2 positive cells which were loaded with the CMV $pp65_{495-503}$ peptide (*i.e.*, cells presenting the HLA-A2/CMV $pp65_{495-503}$ complex) but not to HLA-A2 positive cells which were loaded with the control peptides (Figures 3a-d hereinbelow and data not shown). These results confirm that the isolated antibodies are able to bind the APM/antigen complex displayed on cells but not cells expressing the APM in the absence of the specific antigenic peptide.



Figures 3a-d

Another control experiment tested if the antibodies can bind to cells loaded with the antigen in the absence of the specific APM molecule. Thus, HLA-A2 (negative)/HLA-A1 (positive) APD B cells (*i.e.*, cells devoid of specific APM molecule) were loaded with the specific CMV $pp65_{495\text{-}503}$ peptide. No binding of the Fabs to CMV $pp65_{495\text{-}503}$ peptide-loaded, HLA-A2 negative - cells was observed (data not shown), confirming that the binding of the antibodies to the cells is complex-dependent.

II. ANTIBODIES DIRECTED AGAINST THE HLA-A2/HIV COMPLEX

Isolation of antibodies capable of specifically binding the HLA-A2/HIV complex – A Fab-phage display library was screened using the HLA-A2/HIV Gag $_{77-85}$ (SLYNTVATL) complex and following the third round of selection 41 out of the 90 isolated phage clones were shown by ELISA to specifically bind the HLA-A2/HIV-Gag$_{77-85}$ complex (i.e., APM/antigen complex) but not the HLA-A2 (APM) when complexed with various HLA-A2 restricted control peptides such as HIV-POL (ILEPVHGV), hTERT$_{540}$ (ILAKFLHWL), hTERT$_{865}$ (RLVDDFLLV) and melanoma gp100 G9-209 (ITDQVPFSV). A representative analysis of three Fab clones that reacted only with the HLA-A2/HIV-GAG complex but not with control HLA-A2/peptide complexes is shown in Figure 4, hereinbelow.

Figure 4

In addition, when the HLA-A2/HIV-GAG$_{77-85}$ – specific antibody was incubated with an HIV-GAG$_{77-85}$ peptide – immobilized ELISA plate under conditions allowing the specific binding of the antibody to the HLA-A2/HIV-GAG$_{77-85}$ complex, no binding was observed (not shown).

These results conclusively show that the Fab antibodies specifically bind the HLA-A2/HIV-GAG complex for which they were selected but not the peptide alone or the APM (HLA-A2) when complexed with control antigenic peptides (*i.e.*, the APM in the absence of the specific antigenic peptide).

DNA fingerprint analysis of the 41 clones revealed 4 distinct antibodies. To test the specificity of the antibodies to cells presenting the APM/antigen complex, cells expressing the specific APM molecule (e.g., TAP$^+$ JY cells which express the HLA-A2 gene) were loaded with the specific antigenic peptide (HIV-Gag$_{77-85}$) or with

various HLA-A2 restricted control peptides (e.g., HIV-$POL_{476-484}$, $gp100_{280}$, $hTERT_{540}$, CMV $PP65_{495-503}$) and the ability of the antibodies to bind the cells was determined using FACS analyses. As is clearly shown in a representative experiment (Figure 5 hereinbelow), the Fab antibodies specifically bind to HLA-A2 positive cells which were loaded with the HIV-GAG peptide (*i.e.*, cells displaying the HLA-A2/HIV-GAG complex) but not to HLA-A2 positive cells which were loaded with the control antigenic peptides.

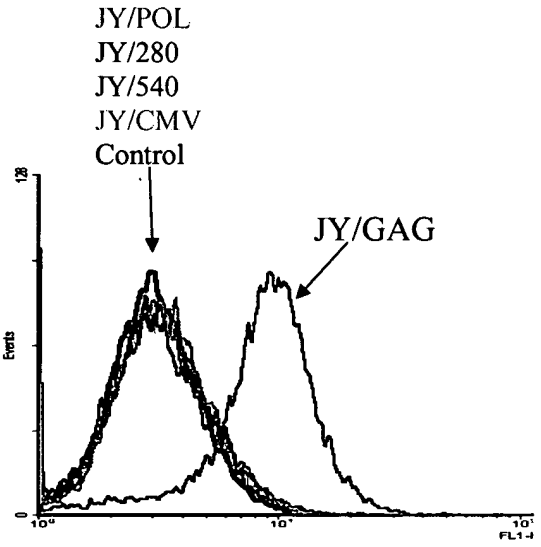


Figure 5

These results conclusively show that the isolated antibodies are able to bind to cells displaying the HLA-A2/HIV-GAG complex but not to cells expressing the APM in the absence of the specific antigenic peptide.

In addition, the reactivity of the Fab antibodies to cells naturally displaying the HLA-A2/HIV-GAG complex was tested by FACS analyses in HLA-A2 positive JY cells which were transfected with either the HIV-GAG gene or various control genes (e.g., HIV-POL or HTLV-1-TAX genes). As shown in Figures 6a-b hereinbelow, 24 hours after transfection with the noted genes (HIV-GAG, HIV-POL or HTLV-1-TAX) the antibodies specifically reacted with HLA-A2-positive JY cells that were transfected with the GAG gene but not with HLA-A2-positive JY cells that were transfected with the HIV-POL (Figure 6a) or the HTLV-1-TAX (Figure 6b) genes.

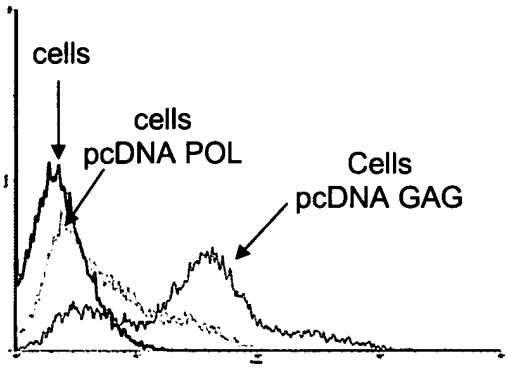


Figure 6a

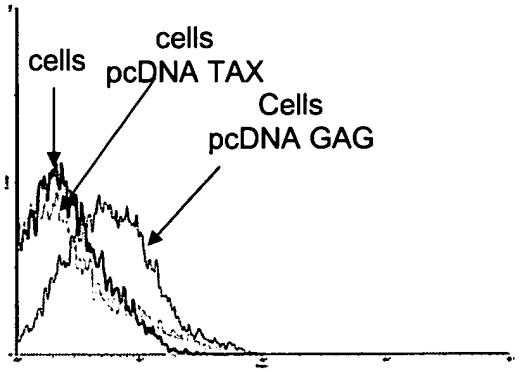


Figure 6b

In a control experiment, HLA-A2 negative cells (APD B cells) were transfected with the GAG gene and were further incubated with the HLA-A2/HIV-GAG specific-antibody. No reactivity of the antibody with GAG-transfected HLA-A2 negative cells was observed (data not shown). These results demonstrate that the the binding of the antibodies to the cells is HLA-A2/HIV-GAG complex dependent.

III. *ANTIBODIES DIRECTED AGAINST THE HLA-A2/INFLUENZA COMPLEX*

Isolation of antibodies capable of specifically binding the HLA-A2/Influenza complex – A Fab-phage display library was screened using the HLA-A2/influenza-$M1_{58-66}$ (GILGFVFTL) complex and following the third round of selection 70 out of 90 isolated phage clones were shown by ELISA to specifically bind the APM/antigen complex used in the selection (*i.e.*, the HLA-A2/influenza-$M1_{58-66}$ complex in this case) but not the APM (HLA-A2) when complexed with various HLA-A2 restricted control antigenic peptides $hTERT_{540}$ (ILAKFLHWL), $hTERT_{865}$ (RLVDDFLLV) or MART-1_{26-35} (ELAGIGILTV).

A representative analysis of 8 Fab clones that reacted only with the HLA-A2/influenza-$M1_{58-66}$ complex but not with control HLA-A2/peptide complexes is shown in Figure 7.

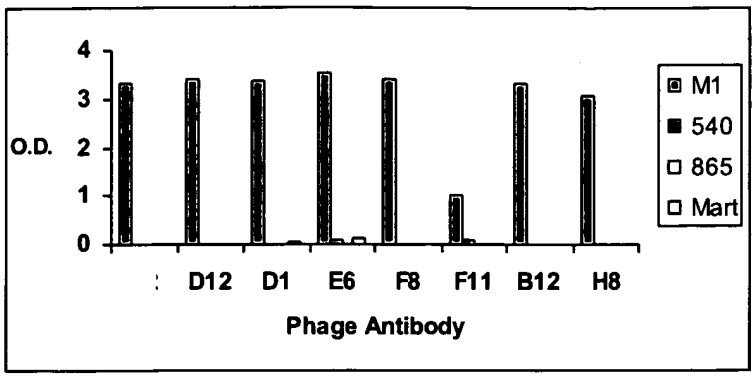


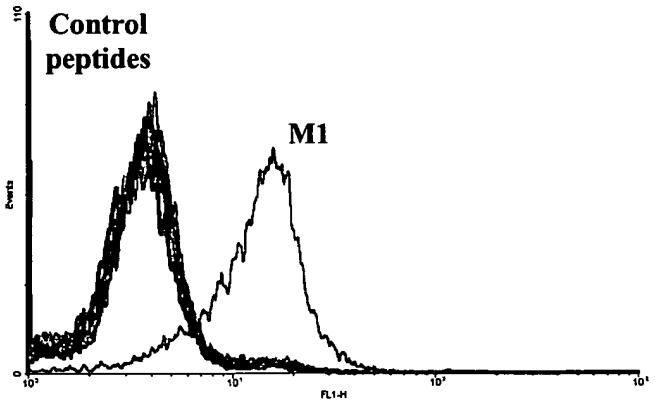
Figure 7

As is clearly shown in Figure 7, the various Fab antibodies specifically bind the HLA-A2/Influenza $M1_{58-66}$ complex but not the APM (HLA-A2) when complexed with control antigenic peptides (*i.e.*, the APM in the absence of the specific antigenic peptide).

In addition, the ability of the antibodies to bind to cells presenting the APM/antigen complex was tested by incubating HLA-A2 positive cells (TAP^+ JY cells) with either the influenza $M1_{58-66}$ peptide or various HLA-A2 restricted control peptides such as $hTERT_{540}$, $hTERT_{865}$, $MART\text{-}1_{26-35}$, EBV (GLCTLVAML), CMV (NLVPMVATV), gp100 G9-209-2M (IMDQVPFSV), gp100 G9-280 (YLEPGPVTA), 154 (KTWGQYWQV), HTLV-1 TAX (LLFGYPVYV), or $MUC1_{13-21}$: (LLLTVLTVL).

As shown in in a representative FACS analysis (Figure 8), the HLA-A2/Influenza $M1_{58-66}$-specific antibody intensely stained cells loaded with the influenza $M1_{58-66}$ peptide (M1) but not cells loaded with the various control peptides.

Figure 8



Similarly, other antibodies directed against additional MHC class I/viral antigenic peptide complexes have been isolated and qualified for their complex binding specificity. Data is available and will be provided to the Examiner upon request.

Altogether, these results conclusively show that using the teachings of the instant application, various antibodies directed against a complex formed of an APM and an antigen derived from a pathogen (e.g., a virus pathogen) can be isolated and qualified for their ability to bind the complex but not the APM or the antigenic peptide when not in complex as claimed.

CURRICULUM VITAE (April 2008)

YORAM REITER

1. ACADEMIC DEGREES

1/1993 Ph.D Department of Chemical Immunology,
The Weizmann Institute of Science, Rehovot, Israel.
Supervisor: Prof. Zvi Fishelzon

2/1987 M.Sc Department of Chemical Immunology, The Feinberg Graduate School
The Weizmann Institute of Science, Rehovot, Israel.
Supervisor: Prof. Zvi Fishelzon

8/1984 B.Sc Biochemistry, Tel Aviv University, Faculty of Life Sciences, Tel Aviv, Israel.

2. ACADEMIC APPOINTMENTS

9/2007- Present Professor, Faculty of Biology,
Technion-Israel Institute of Technology, Haifa, Israel

8/2006- Present Dean, Faculty of Biology,
Technion-Israel Institute of Technology, Haifa, Israel

7/2003-8/2007 Associate Professor, Faculty of Biology,
Technion-Israel Institute of Technology, Haifa, Israel

10/1998-7/2003 Senior Lecturer, Faculty of Biology,
Technion-Israel Institute of Technology, Haifa, Israel

3. PROFESSIONAL EXPERIENCE

8/1997-9/1998 Senior Scientist, Peptor Ltd. Kiryat Weizmann, Rehovot, Israel

1/1993- 7/1997 Research fellow, Laboratory of Molecular Biology, Division of Basic Sciences, National Cancer Institute National Institutes of Health, Bethesda MD.
Supervisor: Dr. Ira Pastan

4. RESEARCH INTERESTS

Molecular Immunology

1. Recombinant antibody fragments for cancer immunotherapy and diagnosis.
2. Recombinant antibodies for studying anti-tumor and anti-viral immune responses
3. Antibody phage display libraries for the isolation of novel reagents for targeting cancer and autoimmune disorders.
4. Recombinant MHC molecules and their use.
5. Molecular mechanisms of T cell function and regulation.
6. Protein engineering of recombinant antibody and T-cell receptor Fv fragments.

5. TEACHING EXPERIENCE

1. 2001-Present, Advanced Molecular Biotechnology, (Undergraduate and Graduate) Design and supervision of a new course. Faculty of Biology, Technion.

2. 2000, Advanced Molecular Biology (Graduate course), Faculty of Biology, Technion.

3. 2000, Cell Biology, (Undergraduate), Faculty of Biology, Technion.

4. 1999-Present, Biochemistry (Responsible teacher) (Undergraduate, 350 students), Faculty of Biology, Technion.

5. 1998, Pharmaceutical Biotechnology and Drug Discovery, (Graduate course), Faculty of Biology, Technion.

6. 1987-1992, Teaching assistant, Laboratory courses: Basics of Biochemistry and Laboratory course in Immunology, The Feinberg Graduate School of TheWeizmann Institute of Science, Rehovot, Israel.

7. 1986, Teaching assistant, Laboratory courses: basics of Biochemistry. The Feinberg Graduate School of The Weizmann Institute of Science, Rehovot, Israel.

6. TECHNION ACTIVITIES

2006-Present, Dean, Faculty of Biology, Technion-Israel Institute of Tehnology

2005- Member of the Management Committee, The Russell Berrie Nanotechnology Institute, Technion

2005-Present, Head of Technion committee for construction of central animal facility

2005-2006, Member of the Technion Thesis Evaluation committee, Technion Graduate School, Technion

2004-2006, Head of Graduate Studies, Faculty of Biology, Technion-Israel Institute of Technology

7. PUBLIC PROFESSIONAL ACTIVITIES

Professional committees and responsibilities

1999, 2001, 2002	Member of the Scientific Advisory Board for Grants in Cancer Research, Ministry of Health, Jerusalem, Israel
1999-2001	Member of Scientific Advisory Board, Immunology Section, ISF-Israel Science Foundation, Israel academy of science, Jerusalem, Israel.
2000-	Member of Scientific Advisory Board on Cancer Immunotherapy, Sharet Institute for Oncology, Hadassah Medical Center, Jerusalem, Israel.
2002-2003	Organizing committee and scientific committee, 32nd Annual Meeting of the Israel Immunology Society.
2003	Chairman, Advisory Board for Grants in Cancer Research, Ministry of Health, Jerusalem, Israel
2003-	Scientific advisory board (SAB), Viventia Biotech. Ltd, Toronto, Canada
2004-	Scientific advisory board (SAB), The Ella Institute for Treatment and Research of Melanoma, Sheba Medical Center.
2004-	Member of the board of directors, Israel Immunology Society
2005-	Member of the Management Committee, The Russell Berrie Nanotechnology Institute, Technion
2005-	Member of the Scientific Advisory Board, National Council for Biotechnology, MOST-Ministry of Science and Technology
2006-	Member of Scientific Evaluation Committee, Infrastructure Program for Biotechnology, Ministry of Science
2006-	Member of Scientific Evaluation Committee, Eshkol Fellowships Grants in Gene Silencing, Ministry of Science.
2008-	Member of the National Committee for Biotechnology, Ministry of Science.

Editorial responsibilities:

Associate Editor – International Reviews of Immunology

Reviewer: Journal of Immunology, Immunity, Cancer Research, International Journal of Cancer, Nature Medicine, European Journal of Immunology, Journal of immunological

Methods, Immunology, Acta Biochimica et Biophysica, Nature Biotechnology, Protein Engineering, Structure, Clinical Cancer Research, Journal of Biological Chemistry, PNAS.

Other professional responsibilities:

Founder – Founder of BioMimic Ltd. A bio-pharmaceutical start-up company (2004)
Founder of AIT-Applied Immune Technologies Ltd. A bio-pharmaceutical R&D company (2006)

Consulting- Scientific consultation to various biotechnology and pharmaceutical companies including: Viventia Biotech Ltd, Canada; Teva Pharmaceuticals, Israel; Peptor, Israel; Pfizer, UK;
Advisor to various start-up companies in Life Sciences.
Advisor to venture capital funds reviewing projects and companies in Life Sciences.

8. MEMBERSHIP IN PROFESSIONAL SOCIETIES

1995- American association for Cancer Research.
1998- American association of immunologists.
1999- Israel Immunology Society

9. HONORS: Prizes awards and scholarships

1988-1991 Ph.D. Studentship Scholarship. The Wolfson Foundation at the Weizmann Institute of Science.

1989-1990 FEBS (Federation of European Biomedical Societies) Fellowship for graduate students.

1992-1993 The Rothschild Postdoctoral Fellowship Award for outstanding Ph.D. graduates.

1994 U.S. Federal Technology Transfer Award, for an outstanding scientific contribution of value to the USA. Awarded by the National Cancer Institute, National Institutes of Health, Bethesda MD.

1998-2001 The "Alon" Fellowship Award, for outstanding young scientists. Awarded by the Israel Council For Higher Education, The Israel Ministry of Education ("VATAT").

1999 Award- The L. Naftali Science Foundation for Biology and Medicine, Jerusalem, Israel.

1999-2001 The Leah and Donald Lewis Academic Lectureship award administrated by the Technion-Israel Institute of Technology.

1999-2002 The TEVA Fellowship Award for Young Scientists in Life Sciences and Medicine. Awarded by TEVA Pharmaceutical Industries Ltd. Israel.

1999-2003 Research Career Development Award (RCDA), ICRF-Israel Cancer Research Fund (USA) New-York, USA.

2000-2001 The TEVA RESAERCH GRANT AWARD, Awarded through The Israel Academy of Sciences and Humanities by TEVA Pharmaceutical Industries Ltd., Israel.

2003 Citation for excellence in teaching – Center for Promotion of Teaching-Technion

2003 The Henry Taub Prize for Excellence in Research, Awarded by the Technion Board of Governs.

2004 The Juludan Prize for Application of science and technology in medicine, awarded by the Technion.

2005 George and Eva Klein Prize for Excellence in Cancer Research, Awarded by ISF- Israel Science Foundation, The Israel Academy of Sciences and Humanities.

2006 The Hershel Rich Technion Innovation Award. Awarded by the Technion Board of Governs.

10. PUBLICATIONS

Theses:

1) M.Sc. thesis: Immunotargeting of complement to tumor cells by monoclonal antibody-complement conjugates. The Feinberg Graduate school of The Weizmann Institute of Science, 1987.

2) Ph.D. thesis: Molecular mechanisms of tumor cell resistance to complement-mediated immune damage. The Feinberg Graduate school of The Weizmann Institute of Science, 1993.

Research papers (peer-reviewed):

1. **Reiter, Y.**, and Fishelson, Z.: Tumor cell lysis by Antibody-complement conjugates. *Complement* 4:154-157, 1987.

2. **Reiter, Y.**, and Fishelson, Z.: Targeting of complement to tumor cells by heteroconjugates composed of antibodies and of the complement C3b. *J. Immunol.* 142: 2771-2777, 1989.

3. Fishelson, Z., Kopf, E., Pass, Y., Ross, L., and **Reiter, Y.**: Protein phosphorylation as a mechnism of resistance against complement damage. *Prog. Immunol.* 7: 205-208, 1989.

4. Yefenof, E., Benizri, R., **Reiter, Y.**, Klein, E., and Fishelson, Z.: Potentiation of target cell sensitivity to NK lysis by antibody-C3b/iC3b heteroconjugates. *J. Immunol.* 144: 1538-1543, 1990.

5. Fishelson, Z., and **Reiter, Y.**: sublytic complement attack potentiates the resistance of tumor cells to lytic doses of complement. *Compl Infl.* 8: 150, 1991.

6. Reiter, Z., **Reiter, Y.**, Fishelson, Z., Loyter, A., Nussbaum, O., and Rubinstein, M.: ClassI MHC antigens are not associated with resistance to NK cell mediated cytotoxicity. *Immunobiol.* 183: 23-39, 1991.

7. **Reiter, Y.**, and Fishelson, Z.: Complement membrane attack complexes induces synthesis of large complement induced proteins (L-CIP) in human leukemic cells. *Mol. Immunol.* 29: 771-781, 1992.

8. **Reiter, Y.**, Cibotariu, A., and Fishelson, Z.: Sublytic complement attack protects tumor cells from lytic doses of antibody and complement. *J. Immunol.* 22: 1207-1213, 1992.

9. Brinkmann, U., **Reiter, Y.**, Jung, S.-h., Lee, B., and Pastan, I.: A recombinant immunotoxin containing a disulfide-stabilized Fv fragment. *Proc. Natl. Acad. Sci. USA* 90: 7538-7542, 1993.

10. **Reiter, Y.**, Brinkmann, U., Webber, K.O., Jung, S.-h., Lee, B.K., and Pastan, I.: Engineering interchain disulfide bonds into conserved framework regions of Fv fragment: improved biochemical characteristics of recombinant immunotoxins containing disulfide-stablilized Fv. *Protein Eng.* 7: 697-704, 1994.

11. **Reiter, Y.**, Brinkmann, U., Kreitman, R.J., Jung, S.-h., Lee, B.K., and Pastan, I.: Stabilization of the Fv fragments in recombinant immunotoxins by disulfide-stabilized Fv fragment. *Biochemistry* 33: 5451-5459, 1994.

12. **Reiter, Y.**, Pai, L., Brinkmann, U., and Pastan, I.: Antitumor activity and pharmacokinetics in mice of a recombinant immunotoxin containing a disulfide-stabilized Fv fragment. *Cancer Res.* 54: 2714-2718, 1994.

13. **Reiter, Y.**, Kreitman, R.J., Brinkmann, U., and Pastan, I.: Cytotoxic and antitumor activity of a recombinant immunotoxin composed of disulfide-stabilized anti Tac(Fv) fragment and a truncated *Pseudomonas* exotoxin. *Int. J. Cancer.* 58: 142-149, 1994.

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11. CONFERENCES

Plenary invited talks: (Listed are meetings in which Reiter, Y was invited. (Major international meetings are marked in bold)

1. The 5th Meeting on the Molecular Basis of Cancer. Foundation for Advanced Cancer Studies, Frederick, MD, USA, June 1994. Title: Recombinant Antibodies for Cancer Therapy
2. **The 6th International Conference on Antibody Engineering, La Jolla, CA, USA, December 1995.**
3. Title: Disulfide stabilized Fv fragments: Novel Approach in Antibody Engineering
4. **International Conference on Immunotoxins, Myrtle Beach, SC, USA, June 1995. Title:** Recombinant Immunotoxins against Colon Cancer
5. Symposium on Phage and Cell Display, The Laura Schwarz-Kipp Institute of Biotechnology, Tel Aviv University and the Israel Ministry of Science, June 1999.Title: Recombinant antibodies by phage-display targeting MDR.
6. **The Danish Cancer Society Symposium, The Royal Danish Cancer Society, Copenhagen, Denmark, August 1999.**Title: Recombinant Immunotoxins for Targeted Cancer Therapy: Technology Closes In on Potential.

7. Goldman Lichtman Mermorial Symposium in Oncology, Cancer Vaccines and Immunotherapy, Hebrew University Medical School and Hadassah Medical Organization, Jerusalem, October 1999.Title: Recombinant MHC molecules and their use for molecular analysis of cancer-specific immune response.
8. 30th meeting of the Israel Immunology Society, Rehovot, February 2001. Title: MHC tetramers: a powerful tool in molecular immunology.
9. Annual Scientific meeting of the Israel Association of Allergy and Clinical Immunology, Ramat-Gan, Israel, April 2001.
10. **11th International Congress of Immunology, Stockholm, Sweden. July 2001**.Title: Critical role for CD8 in the binding of human cancer-specific MHC Tetramers to TCR.
11. 3rd Meeting of the Israel Societies for Experimental Biology(FISEB), Eilat February 2002.Title: Molecular Engineering of T-cell Receptors
12. Neuroimmunology Branch Symposium, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda MD USA, August 2002, Title: Recombinant TCR-like antibodies
13. 32nd Annual Meeting of the Israel Immunology Society, Haifa, Israel. February 2003.Title: TCR-like antibodies
14. **EU Workshop on "Cellular Transport Strategies for Targeting Epitopes, Drugs and Reporter Molecules" Budapest, March 2003**. Title: Targeting tumor cells with recombinant T-Cell Receptor-like Antibodies and MHC-peptide complexes.
15. **2nd International Congress on recombinant Antibodies, Munich, April 28-30, 2003.** Human recombinant antibodies with TCR-like specificity
16. **4th Annual CHI Recombinant Antibodies meeting, May 2003, Cambridge, MA. USA.** Title: Human Recombinant Antibodies with TCR-like Specificity.
17. **Cancer Vaccines 2003, Cancer Research Institute International Symposium, September-October 2003 New York.** Title: TCR-like recombinant antibodies: New tools to study antigen presentation And monitor vaccines.
18. **8th World Congress on Advances in Oncology and the 6th International Symposium on Molecular Medicine. October 2003**, Greece.Title: Recombinant MHC molecules and TCR-like antibodies.
19. XV. National Biophysics Congress, October 2003, Denizli, Turkey. Title: From Membrane Biophysics into Cancer.
20. Fall Symposia on Vaccine Development, ISM-Israel Society forMicrobiology, November 2003.Title: Recruitment of CTL activity by MHC-antibody fusion proteins.
21. **2nd Multidisciplinary Colorectal Congress, February 2004, Noordwijk, The Netherlands.** Title: Immunogenic epitopes as targets for immunotherapy in colorectal cancer.
22. 3rd National Biotechnology Week Meeting, Tel-Aviv, May 2004.Title: Immunotherapy of Cancer.
23. **12th International Congress of Immunology, Montreal, July 2004.**Title: Recombinant antibodies with peptide-specific, MHC-restricted specificity: Implications for study of antigen presentation and MHC-peptide structure.

24. **Mini-symposium on Structure of MHC, 12th International Congress of Immunology, Montreal, July 2004.** Title: MHC tetramers and TCR-like antibodies.
25. BioTech 2005, National Biotechnology Week, May 2005, Tel-Aviv. Title: New approaches to cancer immunotherapy.
26. **8th International Congress on Biological Therapy of Cancer, Dresden, June 2006.** Title: Antibody fragments as anti-cancer agents.
27. **5th International Congress on Recombinant Antibodies, Zurich, June 2006.** Title: Targeting Cellular Responses by Recombinant Antibodies.
28. EU 6th Framework program symposium on Cellular Therapy of Cancer, Manchester, UK, December 2006. Title: Targeting MHC-peptide with recombinant antibodies.
29. **7th International Conference on Therapeutic Antibodies, London, January 2007.** Title: The intracellular proteome as target for antibody therapy.